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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,565	02/17/2006	Dirk Schiller	LYBZ 2 00100	4843
²⁷⁸⁸⁵ FAY SHARPE	7590 11/03/200 LLP	EXAMINER		
	OR AVENUE, SEVEN	DOERRLER, WILLIAM CHARLES		
CLEVELAND,	CLEVELAND, OH 44114		ART UNIT	PAPER NUMBER
			3744	
			MAIL DATE	DELIVERY MODE
			11/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/568,565	SCHILLER ET AL.			
		Examiner	Art Unit			
		William C. Doerrler	3744			
 Period for	The MAILING DATE of this communication app Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ R	desponsive to communication(s) filed on <u>23 Se</u>	entember 2008				
•		action is non-final.				
′ —	, _					
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Ü	in accordance with the practice under E	A parte gadyle, 1000 C.D. 11, 10	0.0.210.			
Dispositio	n of Claims					
4)🛛 C	4)⊠ Claim(s) <u>1-10 and 12-14</u> is/are pending in the application.					
48	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) 🛛 C	laim(s) <u>4,6,9 and 10</u> is/are allowed.					
·	Claim(s) <u>1-3,5,7,8 and 12-14</u> is/are rejected.					
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are objected to.					
•	Claim(s) are subject to restriction and/or	r election requirement				
8) <u> </u>	are subject to restriction and/or	election requirement.				
Application	n Papers					
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>23 September 2008</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
•		· · · · · · · · · · · · · · · · · · ·	-			
	pplicant may not request that any objection to the	- · · ·	* *			
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)∐ Ti	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority un	der 35 U.S.C. § 119					
a) <u></u> 1	2) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.					
3	 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). 					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s	s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3,5,7,8 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morse et al (6,530,237) in view of the 2000266416 Japanese reference (from the 2-17-2006 IDS).

Morse et al disclose applicants' basic inventive concept, a control system for controlling the refrigeration system for a cryopump 14, with a storage tank 40 which is connected to the supply (22) and return (12) lines by control valves to control the refrigerant pressure in the system to control the amount of refrigeration provided to the cryopump at a variable rate from a continuously operating compressor, substantially as claimed with

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the exception of using only the pressure in the low pressure line as a control parameter to open a valve in dependence on a threshold value. The '416 Japanese reference shows this feature to be old in the refrigerant pressure control art (see the abstract). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention from the teaching of the '416 Japanese reference to modify the refrigeration pressure control system of Morse et al by using only the returning low pressure as a control parameter to simplify the control structure, thus making the device cheaper and easier to build. In regard to claims 12-14 claim 2 of the machine translation claims that the pressure sensor "is installed in the high-tension-side path".

Allowable Subject Matter

Claims 4,6,9 and 10 are allowed.

Response to Arguments

Applicant's arguments filed 9-23-2008 have been fully considered but they are not persuasive. Applicant states that Morse does not teach the use of a single pressure sensor. The '146 Japanese reference shows this feature to be old in the cooling system art. One of ordinary skill in the art would be motivated by the Japanese reference to use a single pressure sensor to simplify the control system. Applicant states that Okimura does not show this teaching. The reference relied upon to show this is Japanese publication 2000266416 from the 2-17-2006 IDS. The inventor for this reference is given on the face of the reference as Nishijo Tokuji. The Okimura reference seems to not be related to the '416 reference.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Doerrler whose telephone number is (571) 272-4807. The examiner can normally be reached on Monday-Friday 6:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William C Doerrler Primary Examiner Art Unit 3744

WCD

/William C Doerrler/

Primary Examiner, Art Unit 3744